

**TOWARD THE
END OF HIS LIFE,
DR. LESTER
BRESLOW FORE-
SAW A “THIRD
REVOLUTION” IN
HEALTH. NOW,
FSPH FACULTY
AND ALUMNI ARE
HELPING TO MAKE
IT A REALITY.**



3.0:

A New Operating System for Public Health

In a career spanning seven decades as a leading public health practitioner and thinker, Dr. Lester Breslow gained a well-earned reputation for being ahead of his time.

Breslow, who served as dean of the UCLA Fielding School of Public Health from 1972 to 1980, was an active member of the school's faculty until not long before his death last April at the age of 97. His record of visionary thinking can be traced as far back as the 1940s, when Breslow linked tobacco use to disease in three studies that were later cited in the U.S. Surgeon General's landmark 1964 report. Then there were Breslow's famous Alameda County Human Population Laboratory studies, launched in the early 1960s when he was a member of the California Department of Health Services, which he would later direct. Breslow found, among other things, that a 45-year-old male who followed six of seven healthy lifestyle habits lived an average of 11 years longer than a peer who followed three or fewer. If that seems obvious today, it's because Breslow's work helped to usher in a new era of thinking about health promotion.

So at the dawn of the 21st century, when Breslow – by now well into his 80s – began talking about a third revolution in health, he commanded a rapt audience.

In a widely cited paper published in April 2004 in the *Annual Review of Public Health*, and in a presentation that same month at the annual UCLA Fielding School of Public Health lecture and dinner that bears his name, Breslow laid out his vision for “the third revolution in health” and the implications of the ensuing “third



era” on public health. The first, starting in the 19th century, was marked by the beginning of a successful fight against infectious diseases. By the middle of the 20th century, that success was leading to longer life expectancies – and an associated rise in age-related chronic conditions such as cancer, heart disease and stroke. Breslow was among the leaders who pushed public health into what he would later call its second era, focusing not just on curbing infectious diseases but also on preventing and reducing the impact of these and other chronic diseases.

The way Breslow saw it more than a decade ago, public health was poised for another revolution. The third era would cover not just acute and chronic illnesses; it would be about promoting optimal health. “Lester had been part of the transition from the first era to the second era,” says Dr. Neal Halfon, professor of health policy and management and director of the UCLA Center for Healthier Children, Families and Communities, based in the school. “He saw that people were now living into their 70s and 80s and most of them were reporting that they were in good or excellent health, and he envisioned a new focus on a more comprehensive approach to optimizing the health of all. He was ahead of his time, as always, in this thinking.”

Halfon was interested in Breslow’s notion of how the role of public health might be different in this new era. He wasn’t the only one. Peter Long (Ph.D. ’08) came to the school as a graduate student in 2000 and immediately was drawn to Breslow’s ideas. Long began conducting research using Human Population Laboratory data and meeting with Breslow on a weekly basis. “My career in health policy up to then had been about health insurance and helping people better manage their chronic conditions,” says Long, who is now president and CEO of the Blue Shield of California Foundation. “It was eye-opening to think that there was this untapped area around trying to develop a system for achieving positive health. It felt like a new frontier to me – and still does.”

Long and Halfon held many conversations with Breslow to flesh out how the transformation might be operationalized. Eventually, they took the baton, extended the concepts, and began to use new language to characterize the changes and their implications for the health care system. The first era became the



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1.0 health care system, the second 2.0. And now it was time for a new operating system – 3.0.

“Each era’s system has had its own logic,” Halfon explains. “The first was about saving lives through acute, emergency and rescue care, and public health safety. The 2.0 system is about prolonging life and decreasing levels of disability through chronic disease management and secondary prevention. And the concept for 3.0 is to move toward optimizing the health and well-being of the population. It’s not that one usurps the next – we still need to fight infectious and chronic diseases. But we upgrade the system’s capacity so that we can do more.”

The road to optimized population health and well-being, Halfon and Long believe, is through primary prevention, health promotion, and community-integrated delivery systems. “The 3.0 era involves much more dynamic interactions between genes and the environment across the life course,” Halfon says. “We know, for example, that the mother’s health before the child is even born is going to have important implications on that child’s lifelong health trajectory.”

Dr. Moira Inkelas, associate professor of health policy and management at the school, notes that unlike the earlier versions, 3.0 strives to be a fully integrated system in which all providers and com-

munity services are working toward the same goal – improved population health outcomes. “When you look at it that way, you’re not just attending to the patient in front of you; you’re trying to shift outcomes for whole populations through a life-course and long-term prevention orientation,” says Inkelas, who has been working with a model 3.0 system in Los Angeles called the Magnolia Community Initiative (see the sidebar on page 7).

As an illustration of how a life-course oriented, community-integrated 3.0 system might work in practice, Inkelas offers the case of a 2-year-old child who visits a pediatrician. Noting from a routine screening that the child’s mother is depressed, the doctor might prioritize this concern for the visit, recognizing the child’s greater risk for developmental and cognitive deficits in adulthood. Although the child’s BMI is normal, the doctor notes that nutrition habits are set at a young age and that the neighborhood environment includes few fresh foods, placing the child at high risk for being overweight and developing cardiovascular disease, diabetes or other obesity-related illnesses later in life. The parent is introduced to a member of a physician-led care team who helps the mother set goals, connects her with several community programs, links her with peer social support, and follows up according to an established protocol for children with elevated risk. “In a 3.0 system you would treat the family with the goal of shifting outcomes 50 years later,” Inkelas explains.

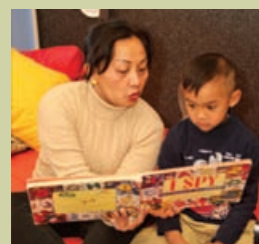
A Model 3.0 System

As states move toward implementing community-integrated health care systems under the Center for Medicare & Medicaid Services' State Innovation Models initiative, they would do well to study the example of the four-year-old Magnolia Community Initiative, a successful collaboration involving more than 70 government and private-sector partner organizations, with significant participation by UCLA Fielding School of Public Health alumni and faculty.

The Magnolia Community Initiative was launched by the Children's Bureau of Southern California in 2008 as a large-scale community mobilization effort to improve the health trajectory of 35,000 children living in a five-square-mile area crossing the Pico Union, West Adams and North Figueroa Corridor neighborhoods just southwest of Downtown Los Angeles. The Children's Bureau targeted four goals shown by research to be key to creating safe and supportive environments where children can thrive: educational success, good health, economic stability and safe and nurturing parenting.

"In its strategic planning, the Children's Bureau concluded that it needed to take a more holistic approach to providing services at the scale that children and families in these neighborhoods needed," says Patricia Bowie (M.P.H. '92), who was brought in at the outset to help develop and design the initiative and is now supporting its implementation. "Traditional services weren't sufficient for obtaining the outcomes they wanted to see, because they weren't embedded in an overall wellness effort. What they were really asking for was more of a public health approach addressing the complexity of issues that contribute to overall health and well-being." In drawing a wide variety of government and community-based groups to the effort, Bowie says, the initiative has galvanized the community and created a shared vision with the promise for much greater impact than if the groups were operating in isolation.

Bowie helped to facilitate partnerships in the health care community, including several with fellow UCLA Fielding School of Public Health alumni – Shannon Whaley (Ph.D. '98), director of research and evaluation at the Public Health Foundation Enterprises WIC program; Lynn Kersey (M.P.H. '85), executive director of Maternal and Child Health Access; and Nancy Halpern Ibrahim (M.P.H. '93), executive director of the Esperanza Community Housing Corporation – as well as a partnership with Vickie Kropenske, director of the Hope Street Family Center and an active member of the UCLA Center for Healthier Children, Families and Communities, based in the school. For what she calls



ABOVE AND OPPOSITE PAGE: The Magnolia Community Initiative, a collaboration among more than 70 government and private-sector partner organizations with significant participation from the Fielding School, embodies 3.0 with its holistic, community-integrated approach to health.

"improvement science," including the development of metrics to determine the impact of the initiative on population health outcomes, Bowie has enlisted the support of the center's faculty, including its assistant director, Dr. Moira Inkelas, and director, Dr. Neal Halfon.

"The Magnolia initiative is demonstrating what a 3.0 system looks like," says Inkelas. "It's one thing to raise awareness of these concepts, but to see how such a system actually functions is important. Despite the challenges of being in an underserved community, Magnolia is putting into place the system elements of a health-optimizing philosophy and paradigm. Organizations are working in 1.0 reimbursement structures, but they are adopting 3.0 care processes and pathways. If we can show that this approach is successful in reducing costs and improving population health outcomes, this will be an excellent approach from which other systems can learn."



Beyond a focus on preventing and managing diseases, the Health 3.0 system seeks to enhance people's capacity to enjoy their lives.



In the 2.0 system, Halfon adds, pediatricians screen for developmental disabilities, and 4-6 percent of children might be referred to regional centers for services. A 3.0 system would focus on a significantly larger group – including children whose developmental or behavioral issues are not acutely disabling in the traditional sense but will, if not dealt with, set them on a lower health development trajectory. That means in addition to maintaining connections to hospitals, chronic disease specialists and disability programs, a 3.0 pediatrician's office would have relationships with a variety of health promotion and prevention programs in the community.

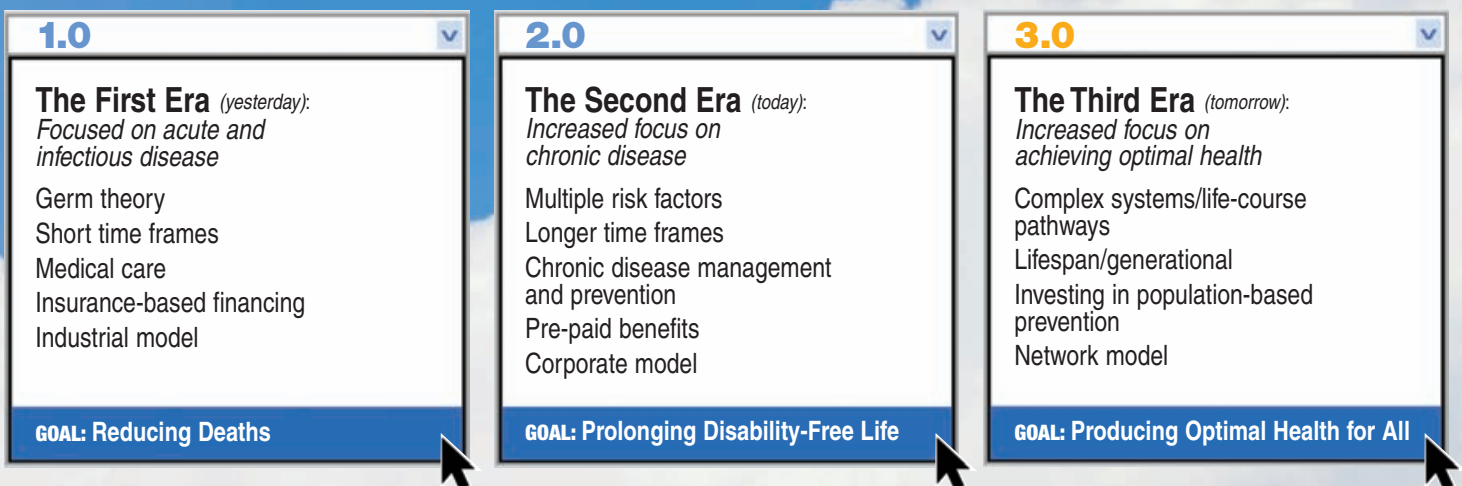
The U.S. health system was designed for the first era, Halfon notes. It was upgraded for the second, but will need a major transformation if it is to meet the needs of the third.

As Long puts it, he and Halfon began “evangelizing” for the 3.0 system several years ago. Among the places where they found receptivity was the Centers for Medicare & Medicaid Services (CMS), the federal agency that administers Medicare, Medicaid and the State Children's Health Insurance Program. The 2010 Affordable Care Act established within CMS a Center for Medicare & Medicaid Innovation (CMMI), charged with testing new models of payment and service delivery that would help to reduce program expenditures while preserving or enhancing the quality of care for beneficiaries.

As the CMMI leadership began to conceptualize what the innovations should accomplish, the 1.0/2.0/3.0 model provided a framework for moving from the accountable care organizations (ACOs) that it currently supports to community-

The Evolving Health Care System

The three eras of health care, first outlined by Dr. Lester Breslow more than a decade ago and further developed by Dr. Neal Halfon, a faculty colleague at the school; and Peter Long (Ph.D. '08), who worked closely with Breslow as a student and is now president and CEO of the Blue Shield of California Foundation.



centered accountable care systems – linking prevention-oriented population health with primary care. One of the key players in the decision-making process was a UCLA Fielding School of Public Health alum, Anthony D. Rodgers (M.P.H. '75). Rodgers, who helped to launch CMMI and served as CMS's deputy administrator for strategic planning and state innovation initiatives, was already thinking about how to integrate traditional population-based public health concepts into the health care system when he came across Halfon at a conference where they were both presenting. "I was talking about three levels of delivery system maturity, and Neal was talking about the 1.0/2.0/3.0 health system," Rodgers says. "We were calling them different things, but it was the same concept. So we married the two, and began working together to better understand the component parts."

At CMS, Rodgers oversaw the development of the recently announced State Innovation Models (SIM) initiative, a \$275 million funding opportunity for states to design and test new payment and delivery models. "My public health degree has always influenced how I've thought about the underlying determinants of health and the inefficiencies of the delivery system when it comes to keeping people healthy," says Rodgers, who left CMS in September shortly after the SIM initiative was announced, and now plans to assist states in implementing their innovation models. "Wherever I've worked, I've tried to leverage what I learned at UCLA about the need to embed population and public health wellness concepts within the delivery system model."

Up to 25 states will receive funding from the SIM initiative to develop innovative models for accountable, community-integrated care, and approximately 10 states will receive additional funding to test their model over a three-year period; at the end of the testing period, recommendations will be sent to the Office of the Secretary of Health and Human Services on which models should be funded in the future. "It's exciting to see states putting in their applications to start working on this issue in a real way – to start implementing the beginning of the third era of health," says Long. California submitted a proposal for developing an innovative model in late September.

Dr. Jim Hester, senior advisor to the CMMI director and acting director of CMMI's Population Health Models Group, explains that many of the initiatives in his center's so-called seamless care groups are focused on assisting health care systems in better coordinating care – the type of vertical integration necessary to move from 1.0 to 2.0. But



he notes that increasing attention is also focused on how CMMI initiatives can help systems address more upstream determinants of health. "CMS understands that we can't get the performance we need for our beneficiaries unless there is a fundamental change in the health care system for all Americans," Hester says. "So we are focusing on creating transformative change that delivers three outcomes: better health care, better health for populations, and lower cost through improvement." In addition to the SIM initiative, CMS earlier this year established the Health Care Innovation Awards – approximately \$900 million in grants for awardees to implement compelling new ideas to deliver better health, improved care and lower costs to beneficiaries, particularly those with the greatest health care needs.

In seeking to communicate the CMS vision across a wide variety of settings, Hester and his colleagues have found the 1.0/2.0/3.0 framework to be powerful. "People get the 3.0 framework in a way that they didn't when we tried other approaches," he says. "It's been a very strong addition to our tool kit in trying to move this initiative forward." For its presentations, Hester's group adapted a PowerPoint slide Halfon had been using on the evolving health care system and the differences between the three eras (see page 8) – a slide that could in turn be traced to the concepts Breslow began articulating more than a decade ago.



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The Centers for Medicare & Medicaid Services' State Innovation Models initiative, which provides \$275 million in funding for states to test and design new payment and delivery models, promotes the 3.0 framework.



The late Dr. Lester Breslow, known throughout his career for advancing ideas ahead of their time, outlined his vision for a “third revolution in health” at the Fielding School’s annual Lester Breslow Distinguished Lecture in 2004.

Inkelas believes the embracing of the 3.0 framework through SIM and other initiatives speaks to CMMI’s interest in working with states to go beyond cost control measures and “move the dial” on population health. “The way accountable care organizations have been operationalized, the initial focus has been on managing the cost of people with chronic conditions,” Inkelas says. “There’s little that’s health promotion-oriented – the ACO model is only bending the cost curve. Now, the goal is to encourage states to think about *shifting* the cost curve, which can occur only if we focus on optimizing health and preventing more people from developing the conditions in the first place.”

“As the ACO model matures, this is the next logical evolution,” agrees Rodgers. “If you change the payment model so that the ACO is incentivized to have a longer-term relationship with the beneficiary, the delivery system can evolve toward community-centeredness.”

Rodgers explains that CMMI sees three areas of performance for which the delivery system should be accountable. The first is improving care – including concepts such as the quality of care, patients’ relationships with providers and their health literacy. The second is cost, which Rodgers notes is related to quality – poor care drives up costs. “The ACO model is built on these two performance dimensions,” Rodgers says. But for 3.0, a third area of accountability is added: population health. “We know that there are social and economic determinants of health, but until now the delivery system hasn’t been accountable for addressing them systematically,” Rodgers says. “As we move toward these new payment models, we want the delivery system to take a longer-term view to raise the wellness of the population by working with the public health and social services infrastructure in the community. The 3.0 system is an upgrade designed to make our delivery systems not only patient-centered, but also community-centered.”

The 3.0 concept has also found resonance outside of the government. Halfon and his colleagues have consulted with the nonprofit Institute for Healthcare Improvement (founded by former CMS administrator Donald Berwick) to introduce the Health 3.0 framework into its Triple Aim Initiative. The institute is working with more than 100 partners to optimize health system performance through new designs that pursue the three dimensions of improving the patient experience of care, improving the health of populations and reducing the per capita cost of health care. One of the first grants Long awarded when he arrived at the Blue Shield of California Foundation in 2010 was for an Institute of Medicine-hosted workshop on how best to measure the Triple Aim, including positive human health. “This is catching on,” Long asserts.

Dr. Jonathan Fielding, professor at the school and director of public health for Los Angeles County, had several discussions with Breslow as Breslow was first envisioning the third revolution in health more than a decade ago. Fielding was, and continues to be, editor of the *Annual Review of Public Health*, the journal in which Breslow’s ideas initially appeared.

“Lester was saying that what’s really important is not just people’s health status, but their ability to enjoy life,” Fielding says. “That was an extremely valuable perspective from someone who had lived through almost a century of changes in public health’s orientation. This is an important way for us to look at health as we set goals and objectives, and I think it will be enduring.”

“Health care is at a crossroads,” adds Halfon. “Much of the focus has been on placing short-term patches on the system to try to reduce cost. Lester was a man of great stature and vision who had a wonderful ability to see the next major change on the horizon. Sometimes it takes a sage leader to shift the narrative and point in the right direction.”